

ADDITIONAL NOTES ON THE GENUS AEGIPHILA -- I

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Since the publication of my monograph of the genus Aegiphila in 1934 (1) considerable additional information has come to light and a large number of additional specimens and photographs have been examined. In addition to the abbreviations for the names of herbaria listed on pages 249 and 250 of the above-mentioned work, the following are employed in the present contribution: Ba = L. H. Bailey Herbarium, Cornell University, Ithaca, N. Y.; Bb = Barbados Museum and Historical Society, Bridgetown, Barbados; Bc = Barnard College, New York City; Bg = Bergens Museum, Bergen, Norway; Br = Jardin Botanique de l'Etat, Brussels; Bu = W. M. Buswell Herbarium, University of Miami, Miami, Florida; Ch = Carey Herbarium, Royal Botanic Gardens, Kew; Cp = Universitetets Botaniske Museum, Copenhagen; Dc = De Candolle Herbarium, Conservatoire et Jardin Botaniques, Geneva; Dr = Botanisches Institut, Dresden; Ed = Royal Botanic Garden, Edinburgh; Hb = H. Bassler Herbarium, N. Y. Botanical Garden, New York City; He = W. G. Herter Herbarium, Montevideo, Uruguay; I = Langlois Herbarium, Catholic University of America, Washington; J = Brooklyn Botanic Garden, Brooklyn, N. Y.; Le = Rijksherbarium, Leiden; Ls = Linnean Herbarium, Linnean Society, London; Mu = Botanisches Museum, Munich; Ol = Universitetets Botaniske Museum, Oslo; Os = Osborn Botanical Laboratory, Yale University, New Haven, Conn.; Ru = Rutgers University, New Brunswick, N. J.; Th = Thunberg Herbarium, Botaniska Institutionen, Uppsala; Us = Botaniska Institutionen, Uppsala; Ve = Museo Comercial de Venezuela, Caracas; Vu = Botanisches Institut der Universität, Vienna; and Z = H. N. Moldenke Herbarium, Watchung, N. J. All specimens hereinafter cited have been annotated with printed and type-written annotation labels, except those of the Linnean Herbarium.

In addition to the numerous variations in the spelling of the generic name noted on page 250, there have recently come to light "Egiphila", "Aegyphilla", and "Aeguephila". It is also worth noting that some specimens of Cornutia pubescens Gaertn. f. have in the past been confused with Aegiphila, the Hahn 920 distributed as "Aegiphila sp." is Bourreria ovata L., and the Pohl 2143 distributed as "Aegiphila sp." is actually Siparuna guianensis Aubl. In the description and discussion of the genus as a whole on pages 251--261 it should be noted that as to habit A. cordata is one of the most beautiful species, A. Deppeana is normally a tree, but

tends at times to become subsaccharate, and A. graveolens and the so-called "salutaris" form of A. mollis exude a fetid or nauseous odor. In regard to habitat, A. Herzogii prefers the open pampas, A. Smithii and A. vitelliniflora have been collected in swamps and marshes, while A. graveolens prefers dry hills and fields. As to elevation, A. bogotensis ascends to 3660 m. in Colombia, A. ferruginea to 3200 m. in Ecuador, and A. Killipii to 3000 m. in Colombia. A. anomala, A. obovata, and A. tornifolia have very fragrant flowers, while those of A. Hassleri are narcotic-odorous after sundown. A. Hassleri, A. bracteolosa, A. Candelabrum, and especially A. breviflora have often 2 or 3 distinct types of flowers in the same cyme or at least on the same branchlet. The flowers of A. Smithii are extremely small for the genus. The branches of the terminal pyramidal thyrse in this genus are always decussate-opposite. In A. graveolens and A. plicata the leaves are densely impressed glandular-punctate beneath. In regard to corolla, the red-purple ones of A. cordata and A. villosissima are noteworthy; those of A. Smithii are especially small in size, while those of A. bogotensis and A. multiflora are especially large. A. Smithii also has especially small calyxes, while those of A. bogotensis are extremely large. A. anomala has the largest calyxes in the genus. The fruit of A. bogotensis is unbonate at apex and that of A. Hassleri is edible. The fact that the fruit of this last-mentioned species is edible should be noted under the economic uses of the genus, as well as the fact that A. Deppeana and A. Luschnathi have been introduced into cultivation. Throughout the monograph "Santander do Norte" should read "Santander Norte" and "Santander do Sur" should read "Santander Sur" (although, actually, the official titles of the Colombian departments in question are "Norte de Santander" and "Santander") -- the "Sur" being here added to distinguish this department more readily from Santander Norte. The number of contributors to our knowledge of the group should be 503 and the number of publications reviewed 191. A list of the several new species and varieties which have recently come to light and their position in the artificial key to species and varieties (pages 263--280), together with other corrections to this key, will be published later. In order to facilitate reference and increase the usefulness of these and all future supplementary notes, the species and varieties will be arranged in alphabetic instead of taxonomic sequence, but each name will be preceded by the number of the species or variety according to the taxonomic sequence proposed in the original monograph. Of extreme interest is the fact that there is no genus cover for Aegiphila in the Linnean Herbarium nor any specimen of A. martinicensis, the type species (often erroneously accredited to him), but

under the genus Clerodendrum sheet number 8 is A. elata and sheet number 9 is A. Deppeana, both regarded as unidentified species of Clerodendrum by Linnaeus.

49a. AEGIPHILA ACULEIFERA Moldenke in Fedde, Repert. 37: 209--210. 1934.

Shrub; branchlets stoutish, tetragonal, deeply 4-sulcate to the apex, densely furfuraceous, abundantly armed with short and more or less recurved prickles about 1 mm. long; principal internodes 3--4.5 cm. long; leaves decussate-opposite; petioles stout, 1.8--2.5 cm. long, furfuraceous, slightly margined; blades thin-membranous, dark green above, somewhat lighter beneath, obovate-elliptic, often very undate in drying, 18--21 cm. long, 7--9.5 cm. wide, acuminate at apex, regularly glandulose-apiculate along the margins (with the apiculations 5--13 mm. apart), cuneate at base, more or less furfuraceous along the venation on both surfaces (and sparingly or obsoletely on the lamina also); midrib stout, very prominent beneath and slightly so above (very broad, especially toward the base above!); secondaries slender, 7--9 per side, prominent beneath, arcuate-ascending, not anastomosing; vein and veinlet reticulation slender, prominent beneath, often undate in drying; inflorescence supra-axillary; cymes solitary, opposite, to 4 cm. long and 5 cm. wide, pronouncedly bifurcate, copiously armed with recurved prickles (about 1 mm. long) throughout, very lax and loosely many-flowered; peduncles stoutish, copiously armed, 1--1.7 cm. long, furfuraceous; pedicels very slender, furfuraceous, 3--4 mm. long; prophylla minute; bracts and bractlets none; calyx obconic, about 7 mm. long and 4 mm. wide at apex, densely pulverulent, sparsely verruculose, its margin 2-lipped, its lips about 2.1 mm. long, equal and truncate; corolla hypocrateriform, white, its tube cylindrical, about 8.3 mm. long, glabrous outside, pubescent within, its lobes 4, oblong-lingulate, about 6.3 mm. long and 3.1 mm. wide, subacute; stamens 4, inserted about 3.6 mm. below the mouth of the corolla-tube, long-exserted; filaments filiform, about 10.8 mm. long, pilose toward the base; anthers oblong, about 1.8 mm. long and 0.7 mm. wide; pistil glabrous, included; style about 5.2 mm. long; stigma bifid, its branches about 3.9 mm. long, parallel; ovary pyriform, about 1 mm. long and 0.9 mm. wide at apex, obscurely 4-lobed, glabrous, 4-celled; fruiting-calyx and fruit not seen.

The type of this very remarkable species was collected by Friedrich Carl Lehmann (No. 8524) at La Conga, in the western Andes of Popayan, at an altitude of 1800--2400 m., El Cauca, Colombia, and is deposited in the herbarium of the Field Museum of Natural History at Chicago. The collector notes that it blooms in June and July. The prickles which

are so abundant on the branchlets, twigs, and peduncles of this species characterize it well and separate it at once from every other known species in the genus. The type collection is erroneously cited on page 349 of my monograph as A. novogranatensis, while the Stork collection is erroneously cited on pages 352 and 476 as A. odontophylla. The Pittier specimen was collected in forests along the Río Naranjo, altitude 200--250 m.; blooming in March.

COSTA RICA: San José: H. Pittier 7584 (Br--2); Cartago: Stork 2230 (A--photo, B--photo, D--photo, F, G--photo, K--photo, N--photo, P--photo, S--photo, W--photo, Z--photo).

COLOMBIA: El Cauca: Lehmann 8524 (B--isotype, B--photo of type, F--type, K--isotype, K--photo of type, N--fragment of type, N--photo of type, S--photo of type, W--isotype, Z--photo of type).

3a. AEGIPHILA ALBA Moldenke, sp. nov.

Arbor; ramis ramulisque crassiusculis argute tetragonis, ad nodos valde complanatis; foliorum cicatricibus magnis suberosis; petiolis crassis dense puberulis; laminis tenuiter membranaceis late ellipticis obtusis vel subacutis integris, ad basin attenuatis vel acuminatis, utrinque sparsissime puberulis, glabrescentibus; inflorescentiis axillaribus glomeratis dense multifloris; pedunculis nullis vel brevissimis; pedicellis sub fructu valde incrassatis; calyce fructifero valde incrassato coriaceo, obconico dense puberulente valde lenticellato.

Tree, to 10 m. tall or taller; branches and branchlets rather stout, sharply tetragonal, light gray, rather densely pulverulent or glabrate, conspicuously flattened and ampliate at the nodes; nodes not annulate; principal internodes 2--5 cm. long; leaf-scars large and corky, somewhat prominent, with an equally large scar just above on older wood left by the falling off of the inflorescences; leaves decussate-opposite, very large; petioles stout, 2--3 cm. long, flattened and canaliculate-margined above, convex beneath, densely puberulent with extremely minute grayish hairs, not noticeably ampliate at base; blades thin-membranous, dark green above, much lighter beneath, broadly elliptic, 18--20 cm. long, 8.5--9.5 cm. wide, obtuse or subacute at apex, entire, attenuate or acuminate at base, very minutely puberulent on both surfaces, becoming subglabrate in age; midrib rather stout, flattened or subprominent-rounded above, rounded-prominent beneath; secondaries slender, 14--18 per side, arcuate-ascending, mostly flat above, sharply prominent beneath, conspicuously arcuate-joined near the margins in many loops; vein and veinlet reticulation sparse, mostly obscure on both surfaces or only the larger portions discernible; inflores-

cence axillary, glomerate, borne in the axils of this season's leaves or at the nodes of last season's growth, practically surrounding the branchlets, the glomerules many-flowered; peduncles absent or to 1 or 2 mm. long, deciduous; pedicels very slender, 1--3 mm. long, puberulent, greatly incrassate in fruit; calyx heavy, leathery, obconic, 5.2--5.5 mm. long, 4--5 mm. wide, verruculose, glabrate, the rim 2-lipped, the sinus about 1.3 mm. deep on one side and 2.4 mm. deep on the other side, the lips truncate and equal or again split into 2 or 3 shorter and truncate teeth; corolla infundibular, white, glabrous, its tube slender, about 5 mm. long and 1 mm. wide, ampliate above, its limb 5-parted, its lobes obovate, about 6 mm. long and 2.4 mm. wide, rounded at apex, venose; stamens 5, inserted about 2.4 mm. below the mouth of the corolla-tube, exerted; filaments filiform, 11--12 mm. long, glabrous; anthers narrowly oblong or linear, 2.4--3 mm. long, auriculate at base, often twisted, dorsifixed at about 1/3 their length; style capillary, included, 2.4--3 mm. long, somewhat flattened, glabrous; stigma bifid, the branches erect, 1.6--3 mm. long, about 0.7 mm. wide; ovary very small, about 1 mm. long and wide, 4-lobed at apex, glabrous, 4-celled; fruiting-calyx very heavy and coriaceous, obconic, to 1 cm. long and wide, prominently lenticellate, densely puberulent; fruit not seen.

The type of this species was collected by Ynes Mexia (No. 6656) in second-growth woods near Quevedo, Canton Vinces, altitude about 50 m., Los Ríos, Ecuador, between October 22 and November 6, 1934, and is deposited in the United States National Herbarium at Washington. Miss Mexia reports that the flowers are white and the tree an abundant one to 10 m. tall, popularly called "lulu". Eggers, who first collected it (in fruit, December 31, 1891), describes it as "arbor altiss." and records the names "koit tree" and "tutumbo".

ECUADOR: Guayas: Eggers s.n. [Balao, 31/12/1891] (B, N--fragment); Los Ríos: Mexia 6656 (N--isotype, N--fragment of type, W--type).

6. AEGIPHILA ANOMALA Pittier.

Addenda and errata to the description as published on pages 288 and 289: Internodes to 4 cm. long; leaf-scars to 7 mm. long and 5 mm. wide; petioles to 2.5 mm. long; blades membranous or subcoriaceous, to 35 cm. long and 13 cm. wide; calyx in anthesis to 6 mm. long and 4 mm. wide, puberulent or very short-pubescent, often 2-lipped; corolla large, exerted; fruiting-calyx very large when mature, obvolute and cucullate only when immature, to 19 mm. wide, often eventually splitting on one side; fruit to 12 mm. long, umbonate with a light and corky umbo at the apex.

The number of the type collection, cited on pages 289 and

475 as H. Pittier 16,711, seems on further investigation to be a herbarium number of the Instit. Physico-geogr. Nat. Costaric. rather than a Pittier number.

Additional citations: COSTA RICA: Limón: H. Pittier s.n. [Herb. Instit. Physico-geogr. Nat. Costaric. 16,711] (A--photo of type, B--photo of type, Cb--2 isotypes, D--photo of type, F--photo of type, G--photo of type, K--isotype, N--fragment of isotype, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type); Stork 2290 (F, N--fragment).

21a. AEGIPHILA AUSTRALIS Moldenke, sp. nov.

Frutex; ramulis obtuse tetragonis dense puberulis; hornotinis subgracilibus tetragonis dense breviterque pubescentibus vel tomentellis; petiolis dense breviterque pubescentibus; laminis tenuiter membranaceis obovate-ellipticis brevissime acuminatis integris, ad basin longe acuminatis, supra densiuscule breviterque pubescentibus et glanduloso-punctatis, subtus dense tomentellis; inflorescentiis axillaribus; cymis dense multifloris.

Shrub; branchlets medium, obtusely tetragonal, grayish, densely puberulent, the leaf-scars usually elevated; twigs rather slender, tetragonal, densely short-pubescent or tomentellous; nodes not annulate; principal internodes 1--6 cm. long; leaves decussate-opposite; petioles slender, 2--5 mm. long, densely short-pubescent; blades thin-membranous, dark green above, lighter beneath, obovate-elliptic, 3.5--10.4 cm. long, 1.7--6.3 cm. wide, very short-acuminate at apex, entire, long-acuminate at base, rather densely short-pubescent and glandular-punctate above, densely tomentellous beneath; midrib slender, slightly prominent on both surfaces, more so beneath, but mostly hidden by the dense pubescence; secondaries slender, 5 or 6 per side, arcuate-ascending, not conspicuously anastomosing; vein and veinlet reticulation hidden; inflorescence axillary, solitary, opposite, abundant, shorter than the leaves; cymes densely many-flowered, 1.5--3 cm. long, 1--2.6 cm. wide, more or less brachiate; peduncles very slender, 5--15 mm. long, densely flavescent-pubescent like the twigs; bracts none; bractlets and prophylla linear, 2--5 mm. long, densely flavescent-pubescent; calyx light and thin, obconic, 1.6--2 mm. long, about 1.6 mm. wide, densely short-pubescent, its rim very minutely 4-denticulate, the teeth being merely the terminations of 4 heavier costae; corolla infundibular or hypocrateriform, its tube slender, about 2 mm. long and 1 mm. wide, ampliate above, its limb 4-parted, its lobes elliptic, about 2 mm. long and 1.2 mm. wide, rounded at apex, venose; stamens 4, inserted about 1.8 mm. below the mouth of the corolla-tube, equalling the lobes or exserted; filaments

filiform, 2.5--4 mm. long, twisted, glabrous; anthers oblong, about 1 mm. long and 0.5 mm. wide, dorsifixed near the base, rounded at both ends; style capillary, included, about 2 mm. long, glabrous; stigma bifid, its branches about 1 mm. long, twisted; ovary minute, about 0.5 mm. long and wide, 4-lobed, glabrous, 4-celled; fruiting-calyx and fruit not seen.

The type of this species was collected by Ernst Heinrich Ule (No. 1520) at a laguna in the Campo d'Una, Santa Catharina, Brazil, in December, 1889, and is deposited in the herbarium of the Botanisches Museum at Berlin.

BRAZIL: Santa Catharina: Pabat 435 (B); Ule 1520 (B--type, N--2 fragments of type, P--isotype).

70. AEGIPHILA BARBADENSIS Moldenke.

Additional citations: BARBADOS: Warming 71 (Cp), 101 (A--photo of type, B--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, W--photo of type, Z--photo of type).

3. AEGIPHILA BOGOTENSIS (H.B.K.) Moldenke.

The third synonym on page 283 should read "Amerina tomentosa (H.B.K.) P. DC."

Additional citations: COLOMBIA: Santander Norte: Killip & Smith 19,706 (N); Schlim 306 (Cb, N--photo, Z--2 photos); Cundinamarca: Goudot s.n. [Bogotá] (P--2); Karsten s.n. [Bogotá] (N--photo, Z--photo); Linden 798 (Bm--2, Cb, P, V, X); Mutis 2332 (W), s.n. (P--cotype); Triana 2123 (Bm, Br, Cb, Ed, N--photo, P, Z--2 photos), 3743 (Bm); Tolima: Goudot s.n. [Quindiu] (Z--2 photos); Purdie s.n. [Summit of Quindiu] (K), s.n. (A--photo, B--photo, D--photo, F--photo, G--photo, K, N--2 photos, S--photo, W--photo, Z--2 photos); Nariño: Triana 2124 (Bm--2, Cb, Ed, V, Z--2 photos); El Cauca: Pennell 7097 (N); Department undetermined: Dawe 192 (K). ECUADOR: Carchi: Lehmann 6338 (Z--photo); Pichincha: Schimpff 252 (B--2, Cb, N--fragment), 267 (B--2, Cb); Los Ríos: Rimbach 466 (S). LOCALITY OF COLLECTION UNDETERMINED: Herb. Baillon s.n. (P).

80. AEGIPHILA BOLIVIANA Moldenke.

The Steinbach 5066 cited on page 400 as the type collection, should more accurately be referred to as a cotype. In all my monographic work I am using the term "cotype" in its original meaning (4), viz. "One of two or more specimens together forming the basis of a species, no type having been selected. No species would have both type and cotypes, but either the former or two or more of the latter." The cotype, therefore, as I employ the term, is synonymous with what Bather and Swingle (5, 6) term "syntype".

Additional citations: BOLIVIA: Santa Cruz: Steinbach 2799

(Z--photo), 3116 (Z--photo), 3186 (B), 5066 (A--photo of cotype, B--photo of cotype, D--photo of cotype, F--cotype, G--photo of cotype, K--photo of cotype, N--photo of cotype, P--photo of cotype, W--photo of cotype, Z--photo of cotype), 6437 (A--photo of cotype, B--photo of cotype, Cb--cotype, D--photo of cotype, F--photo of cotype, G--photo of cotype, K--cotype, N--photo of cotype, W--photo of cotype, Z--photo of cotype), 6554 (Cb, K, Z--photo), 7250 (Bm, Ca, Cb, E, Ed, K, N--2 photos, Ut, Z--3 photos), 7289 (B, Bm, Ca, Cb, E, Ed, K, N--photo, Z--2 photos).

23. AEGIPHILA BRACHIATA Vell.

It seems probable that further investigation may reveal Glaziou 14,165 and 17,714 to represent a different species, as yet undescribed, with much smaller calyxes and corollas and smaller, darker, more entire leaves. It also seems probable that the Sellow specimens at Berlin may all be A. Hassleri or a variety thereof.

Additional citations: BRAZIL: Rio de Janeiro: Glaziou 14,165 (B--photo, Br, Cb, Cp, D--photo, F--photo, K, N--2 photos, P, S--photo, W--photo, Z--2 photos), 17,714 (Cb, Cp, K, N--photo, P, Z--2 photos); Paraná: Jönsson 979a (B, Cb, E, N, S, W); Santa Catharina: Fr. Müller s.n. [Schwacke 1465] (Cb); Rio Grande do Sul: Gaudichaud 1801 (P); State undetermined: Sellow 1259 (K), 1269 (B, P), 1322 (B, Bm, N--photo, P, Z--2 photos), 3012 (A--photo, B, G--photo, N--photo, Z--2 photos), s.n. (Vu). PARAGUAY: Jorgensen 3662 (Cp, D, E, S, W).

120. AEGIPHILA BRACTEOLOSA Moldenke.

Aegiphila solanifolia Mart., in herb. -- The name Pseud-aegiphila breviflora Rusby, reduced to synonymy under A. bracteolosa with a question on pages 456--458, has proved upon more careful examination to represent a distinct species. The Cardenas 16, special, cited under A. bracteolosa on page 458, is the type collection of A. breviflora. The 2 Martius collections cited hereinafter and designated as Herb. Monac. 1004 and 1005 are cotypes of A. arborescens var. longiflora Schau.; therefore this trinomial is to be regarded as a synonym of A. bracteolosa rather than of A. integrifolia as stated on page 337.

Additional citations: BRITISH GUIANA: Lang & Persaud 253 (A--photo of type, B--photo of type, D--photo of type, G--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type). BRAZIL: Amazonas: Ducke 7351 (Cb--2, N--fragment, N--photo); Jobert 630 (P); Krukoff 5060 (B, Cb, K--2, N--2, S); Luetzelburg 22,296 (Mu); Martius s.n. [Porto dos Miranhao, Decbr.; Herb. Monac. 1004] (Mu), s.n. [Barra de Rio Negro, Octbr.; Herb. Monac.

1005] (Mu), s.n. [Prov. Rio Negro; Herb. Monac. 1006] (Mu); Poeppig 2488 (V, Z--2 photos); Schwacke 3635 (Cb); Spruce 1283 (K), s.n. [In vicinibus Barra] (A--photo, Bm, Cb, D--photo, Ed, F, N--3 photos, P, W--photo, Z--4 photos); Ule 5435 (B, Cb, Le, N--photo, Z--photo); Par : Spruce 1013 [Herb. Monac. 1003] (Mu). PERU: Loreto: Tessmann 5363 (B, Hb, S). ILLUSTRATION: Line drawing (N).

20. AEGIPHILA BRASILIENSIS Moldenke.

Additional citations: BRAZIL: Rio de Janeiro: United States Exploring Exped. [Wilkes] s.n. [Rio de Janeiro] (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--isotype, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

39a. AEGIPHILA BREVIFLORA (Rusby) Moldenke, *Phytologia* 1: 95. 1934.

Pseudaegiphila breviflora Rusby, *Mem. N. Y. Bot. Gard.* 7: 1927.

Shrub [or "tall perennial herb" according to Rusby]; branchlets acutely tetragonal, more or less sulcate, very medullose, densely incanous-strigose with short, closely-appressed forward-pointing hairs; internodes 4--5.5 cm. long; leaves decussate-opposite; petioles much reduced, rather stout, 3--4 mm. long, densely incanous-strigose, mostly contracted at apex, slightly alate-margined, canaliculate above; blades chartaceous, dark green above (brunnescent in drying), lighter beneath, oblanceolate, 10--21 cm. long, 3--6 cm. wide, acute or short-acuminate at apex, obsoletely sinuate-serrate with gland-tipped teeth, long-cuneate at base and gradually tapering into the petiole, densely brownish-puberulent on both surfaces; midrib stout, slightly prominulent above, very prominent beneath; secondaries slender, 8--10 per side, lightly arcuate- or falcate-ascending, prominulent beneath, not conspicuously anastomosing; vein and veinlet reticulation sparse, fine and delicate, obscure above, not prominulent beneath; inflorescence axillary; peduncles slender, 1--2 cm. long, densely incanous-strigose with very short closely-appressed hairs; cymes subcapitate, solitary, opposite, 2--3 cm. long, 1--3 cm. wide, once furcate, very densely many-flowered; bracts and bractlets none; prophylla hidden in the dense inflorescence; calyx obovoid-campanulate, 3.5--4.7 mm. long, 2--2.5 mm. wide, densely incanous-strigose, its rim normally 4-toothed with short, equal, erect, obtuse, lobe-like teeth, but often irregularly 3-toothed or more or less 2-labiate with one lip entire and the other 2-lobed; corolla accrescent, slightly exceeding the calyx, straight, its tube cylindric, slender, about 2

mm. long, somewhat ampliate at apex, its limb slightly 2-labiate, the upper lip entire or subentire and to 3 mm. long, the lower lip 3-lobed, with the lobes each smaller than the upper lip [occasionally the limb is 3-lobed or 4-lobed with all the lobes broadly ovate-lingulate, obtuse, and subequal]; stamens 3 or 4, inserted about 1 mm. below the mouth of the corolla-tube, exerted, mostly didynamous, the 2 long ones normally equal and 2.5--5 mm. long, the 2 short ones frequently unequal and 1--2 mm. long [in the occasional 3-lobed corollas only 3 subequal stamens are present]; filaments filiform, slightly flattened, glabrous; anthers oval-oblong, about 1 mm. long and 0.5 mm. wide, dorsifixed near the base, lightly cordate, 2-celled, the thecae parallel; pistil exerted; style capillary, 4--5 mm. long, glabrous; stigma bifid, its branches filiform, strongly and widely recurved, 1--2 mm. long; ovary hemispheric-turbinate, about 1 mm. long and wide, glabrous, its truncate summit bearing a marginal, recurved, membranous, annular appendage (according to Rusby) or non-appendaged and umbilicate and more or less 4-lobed; fruiting-calyx and fruit not seen, although Rusby describes immature fruits as being closely enclosed by the base of the calyx, hemispheric-turbinate, with the annulus much expanded, coriaceous, lustrous, light brown, and recurved so as to conceal the upper third of the fruit, and with a concave center, 2- or 3-sulcate, and 2- or 3-seeded.

The type of this most remarkable species was collected by Martin Cardenas (No. 16, special) at Santa Ana de Yacuma, at an elevation of 700 feet, El Beni, Bolivia, March 4, 1922, and is deposited in the Britton Herbarium of the New York Botanical Garden. This plant was referred by me in my monograph (pages 457--458) with some doubt to A. bracteolosa, which it does indeed closely resemble superficially. A. bracteolosa, however, is a native of British Guiana, Brazil, and Peru, and is confined to Amazonian forests. A. breviflora, if it belongs in this genus at all, is a member of the group Cymosae, subgroup Lobatae, while A. bracteolosa is very obviously a member of the group Paniculatae, subgroup Dentatae. In his original description Dr. Rusby throws out the suggestion that this plant may be a natural hybrid between an Aegiphila species and a Callicarpa. Unquestionably the remarkable variations exhibited by the flowers on the type collection indicate something abnormal, but I am unable to discern any characters which point especially to the genus Callicarpa. The chief characters by which Callicarpa differs from Aegiphila are that in Callicarpa the stigma is capitate or peltate, the flowers are usually polygamous and never diclinous (heterostylous) as in Aegiphila, the stamens are inserted at the very base of the corolla-tube, and the

ovary is mostly pubescent. None of these features is exhibited by our plant, although it does have the axillary inflorescences characteristic of Callicarpa. Whether or not its fruiting-calyxes are accrescent is not yet known. The fact that the type collection seems unquestionably to be abnormal leads me to attach less importance to the didynamous nature of the stamens seen in many of the flowers than does Dr. Rusby. Could it be shown that the stamens are regularly didynamous on normal specimens of this species and could the curiously irregular features of the calyx-rim and corolla-limb be proved to be regular features of the species, and were the remarkable ovary and fruit features mentioned by him always exhibited, then I should perhaps be willing to maintain the genus Pseudaegiphila for this plant. The fact is, however, that there seems very little constancy in these features on the four specimens making up the type collection. Many of the calyxes are quite regularly 4-toothed and not at all labiate, while others are only obscurely so. The corolla limb, too, is quite often almost regular, while on the numerous 3-lobed ones the lobes are all equal. The stamens seem to show no constancy at all. The 3-lobed corolla usually have but 3 stamens and these may or may not be equal in length. The 4-lobed corolla have 4 stamens and these are mostly noticeably didynamous, but not regularly or uniformly so. Usually the 2 shorter stamens are equal or subequal, but the 2 longer stamens mostly are of varying lengths again. The characters of the ovary and immature fruit are similarly inconstant. The strange annular appendage which Dr. Rusby describes is indeed present on a number of the ovaries, but I have examined just as many flowers from the same cyme where the ovary exhibited no trace of this annular ring, but was the normal, umbilicate, 4-lobed, 4-sulcate ovary so wide spread in the genus Aegiphila. The foliar characters of the species are precisely those of A. bracteolosa.

BOLIVIA: El Beni: Cardenas 16, special (K--isotype, MI--isotype, N--type, N--photo of type, W--isotype, Z--photo of type).

102. AEGIPHILA BUCHTIENII Moldenke.

Additional citations: BOLIVIA: La Paz: Buchtien 1716 (Z--photo), 1717 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type & photo of isotype).

99. AEGIPHILA CANDELABRUM Briq.

Add to description: Fruiting-calyx campanulate, leathery, 4--6 mm. long, 5--9 mm. wide, densely hirtellous, its rim shallowly 4-toothed with triangular teeth about 1 mm.

long and 4 mm. wide at base, acute at apex, or obscurely repand; fruit drupaceous, elliptic-ovate, 7--12 mm. long, 5--8 mm. wide, mostly subumbonate at apex, glabrous, not nitid.

Additional citations: BRAZIL: Matto Grosso: Hoehne, Com. Rondon 4301 (N). PARAGUAY: Fiebrig 4638 (Cb--2, Z--photo), 4875 (Bm, Cb--2, Ed, Le, Z--3 photos), 5039 (Cb, N--fragment, N--2 photos, Z--2 photos), 5201 (B); Hassler 2886 (Bm, Z--photo), 7974 (Bm, Cb--2, N--2 photos, P, X, Z--2 photos), 7974a (Bm, Cb, P, X, Z--photo), 8120 (Bm--isotype, Z--photo of type).

40. AEGIPHILA CAPITATA Moldenke.

Additional citations: BRAZIL: São Paulo: Burchell 3547 (A--photo of type & photo of isotype, B--photo of type, D--photo of type & photo of isotype, F--photo of type & photo of isotype, G--photo of type, N--photo of type & photo of isotype, S--photo of type, W--photo of type & photo of isotype, Z--photo of type & photo of isotype).

18. AEGIPHILA CASSELLIAEFORMIS Schau.

Additional citations: BRAZIL: Rio de Janeiro: Raben 842 (Br--isotype); São Paulo: Burchell 3669 (A--photo, B--photo, D--photo, F--photo, G--photo, K, N--photo, P--photo, W--photo, Z--2 photos), 3704 (A--photo, B--photo, D--photo, F--photo, G--photo, P--photo, W--photo, Z--photo).

87. AEGIPHILA CAUCENSIS Moldenke.

Additional citations: COLOMBIA: Caldas: Pennell, Killip, & Hazen 8667 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type & 2 photos of isotypes, P--photo of type, S--photo of type, W--photo of type, Z--photo of type & 2 photos of isotypes).

54. AEGIPHILA CAYMANENSIS Moldenke.

It appears that the type collection of this species was gathered on Grand Cayman on January 17, 1891. It should be so written in the citations on page 354 and the New York specimen should be described as "fragment of type".

Additional citations: CAYMAN ISLANDS: A. S. Hitchcock s. n. [Grand Cayman, 1-17-'91] (A--photo of type, B--photo of type, D--photo of type, E--isotype, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

90. AEGIPHILA CEPHALOPHORA Standl.

L. H. and E. Z. Bailey describe this species as a "tree" and record its blooming in July.

Additional citations: PANAMA: Canal Zone: Aviles 988 (F);

Bailey & Bailey 662 (Ba, F); Bangham 543x (N--2 photos, Z--2 photos); Kenoyer 607 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

98. AEGIPHILA CHRYSANTHA Hayek.

The Poeppig 2314 collection, being designated as the type by myself on page 426 from the several collections originally cited by Hayek, ought to be referred to as a logotype.

Additional citations: ECUADOR: Manabi: Eggers 14,838 [Herb. Monac. 1842] (Op, G, K, Le, Mu, N, N--2 photos, P, S, Z--2 photos); Guayas: Eggers 14,348 [Herb. Monac. 1840; Macbride photos 20,349] (A--photo, B, B--photo, D--photo, F--photo, G--2 photos, Le--2, Mu, N--2 photos, P--photo, S--photo, Vu--2, W, W--photo, Z--4 photos); Province undetermined: Schimpff 279 (B). PERU: Loreto: Klug 2027 (A, B, E, K, Mi, W); Poeppig 2314 (N--photo of logotype, P--isotype, Z--photo of logotype). BRAZIL: Pernambuco: Schenck 4074 (N--photo, Z--photo); Bahia: Curran 225 (Z--photo). BOLIVIA: Santa Cruz: Kuntze s.n. (Z--photo).

44b. AEGIPHILA CONTURBATA Moldenke in Fedde, Repert. 37: 210. 1934.

Shrub; branchlets stout, very deeply 4-sulcate to the apex, densely ochraceous-villose-tomentose with very short hairs; internodes 3--5 cm. long; leaves decussate-opposite; petioles stout, 1.5--2.5 cm. long, densely villose-tomentose; blades membranous, very dark above (brunneascent in drying), incanous beneath, obovate-elliptic or obovate, 12.5--13.5 cm. long, 5.5--7.5 cm. wide, acute at apex, entire, cuneate at base, finely short-pubescent above, densely incanous-tomentose with very short hairs beneath; midrib very stout and very prominent beneath, sharp and narrowly prominent above; secondaries slender, 10--13 per side, arcuate-ascending, close together, prominent beneath; inflorescence supra-axillary; cymes solitary, opposite, to 3.3 cm. long and wide, very dense and almost subcapitate, densely many-flowered; peduncles slender, 1--1.7 cm. long, densely villose-tomentose; pedicels slender, tomentose; calyx infundibular, about 6.2 mm. long and 3.6 mm. wide at apex, densely villose outside, glabrous within, its rim irregularly 4-lobed; corolla infundibular, its tube cylindrical, about 5.2 mm. long, its lobes 4, oblong-lingulate, about 1.8 mm. long and 1 mm. wide, acute; stamens 4, inserted about 1 mm. below the mouth of the corolla-tube, long-exserted; filaments filiform, about 4.1 mm. long, glabrous; anthers not seen; pistil glabrous, slightly exserted; style slender, about 5.1 mm. long; stigma bifid, its branches about 1.8 mm.

long, not greatly divaricate; ovary oblong, about 0.6 mm. long and wide, truncate at both ends, glabrate, 4-celled; fruiting-calyx and fruit not seen.

The type of this very perplexing species was collected by John Newman in Maranhão, Brazil [the label is inscribed "Maranhã"], and is deposited in the herbarium of the Conservatoire et Jardin Botaniques at Geneva. The species differs from A. villosa in its deeply sulcate branchlets, its very short pubescence on the branchlets and leaves (1 mm. long or less), its decidedly pubescent upper leaf-surfaces, and the pronouncedly tomentose character of the pubescence on the lower surface of its mature leaves. Very immature leaves in the process of expanding may exhibit a more villose pubescence, but mature blades never possess the long, straight, ochraceous hairs of A. villosa nor the short, straight, strigose ones of A. intermedia.

BRAZIL: Maranhão: Newman s.n. (B--photo of type, Cb--type, K--photo of type, N--fragment of type, N--photo of type, S--photo of type, Z--photo of type).

112. AEGIPHILA CORDATA Poepp.

Additional citations: PERU: Loreto: Poeppig 2158 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type & photo of isotype, P--isotype, S--photo of type, W--photo of type, Z--photo of type & photo of isotype). BRAZIL: Acre Territory: Ule 9720 (B, K, Le).

113. AEGIPHILA CORDIFOLIA (Ruíz & Pav.) Moldenke.

It is of interest to note that although the original description of this species gives the locality as "Miña", the specimens in the British Museum herbarium are inscribed "Luña".

Additional citations: PERU: Amazonas: A. Mathews s.n. [Chacapoyas] (Bm, Cb, N--fragment); Huanuco: Macbride 3922 (A--photo, B--photo, D--photo, G--photo, K--photo, N--photo, P--photo, S--photo, W--photo, Z--photo); Department undetermined: Ruíz 188 (B--isotype); Ruíz & Pavon s.n. [Miña, Panatahua] (A--photo of isotype, B--photo of isotype, Bm--type, Bm--2 isotypes, Cb--isotype, D--photo of isotype, F--photo of isotype, G--photo of isotype, K--isotype, K--photo of isotype, N--fragment of isotype, N--2 photos of isotypes, P--photo of isotype, S--photo of isotype, W--photo of isotype, Z--2 photos of isotypes).

29. AEGIPHILA CORIACEA Moldenke.

Additional citations: BRAZIL: State undetermined: Freyreiss s.n. (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type,

N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

10. AEGIPHILA COSTARICENSIS Moldenke.

Errata and addenda to description on page 294: Calyx cylindrical or obconic, 3.5 mm. long and 1.8 mm. wide, light, glabrous, its rim slightly flaring, 5-toothed, its teeth acute; corolla hypocrateriform, its tube very slender, to 8.5 mm. long, its limb 5-parted, its lobes narrowly oblong, 5.2-6 mm. long; stigma bifid, its branches 2.3--2.6 mm. long, parallel; ovary prismatic, 4-lobed, shallowly umbilicate at apex, 4-celled, each cell with one ovule attached at the base. The type collection is sometimes cited as "Tonduz 9167".

Additional citations: COSTA RICA: Guanacaste: Standley & Valerio 44,597 (W), 44,606 (W), 45,538 (A--photo, B--photo, D--photo, F--photo, G--photo, K--photo, N--fragment, N--photo, P--photo, S--photo, W--photo, Z--photo); Puntarenas: H. Pittier s.n. [Herb. Institut. Physico-geogr. Nat. Costaric. 16,034] (N--photo, W, Z--photo). PANAMA: Bocas del Toro: Pittier & Tonduz s.n. [Herb. Institut. Physico-geogr. Nat. Costaric. 9167] (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type & photo of isotype, P--photo of type, S--photo of type, W--isotype, W--photo of type, Z--photo of type & photo of isotype); Tonduz 8564 [Herb. Monac. 4094; Herb. Institut. Physico-geogr. Nat. Costaric. 8564] (Mu, W).

35. AEGIPHILA CRENATA Moldenke.

It seems rather certain that more detailed study will reveal that the Pernambuco specimens cited on page 327 and hereinafter under this name will prove to be distinct from the southern Brazilian specimens which typify the species. The Pernambuco form inhabits thickets and blooms in July.

Additional citations: BRAZIL: Pernambuco: Pickel 3042 (Ba, I, N--2, W); Minas Geraes: Schenck 3310 (B, Z--photo); Paraná: Dusén 9701 (Z--photo), 10,541 (A--photo of type, B--isotype, B--photo of type, Cb--isotype, D--isotype, D--photo of type, E--isotype, F--photo of type, G--isotype, G--photo of type, K--isotype, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type), 16,238 (Cb, D, E, G, K, N--photo, Z--photo), s.n. [May 5, 1911?] (Z--photo); Jönsson 403a (A--photo, B, B--photo, D--photo, F--photo, G--photo, K--photo, N--photo, P--photo, W, W--photo, Z--2 photos); State undetermined: Sellow 5091 (B, Bm, Z--2 photos).

9. AEGIPHILA CUNEATA Moldenke.

Additional citations: PERU: Loreto: Killip & Smith 28,379 (N--photo, Z--photo), 28,386 (A--photo of isotype, B--photo of isotype, D--photo of isotype, G--photo of isotype, K--photo of isotype, N--photo of isotype, P--photo of isotype, W--photo of isotype, Z--photo of isotype). BRAZIL: Acre Territory: Ule 9859 (K, Le, N).

41. AEGIPHILA DENTATA Moldenke.

Additional citations: BRAZIL: São Paulo: Edwall s.n. [Herv. Geogr. e Geol. 4362; Inst. Biol. 15,614] (G--photo of type, N--photo of type, W--photo of type, Z--photo of type).

117. AEGIPHILA DEPPEANA Steud.

A specimen of this species was determined as "Callicarpa sp. nov." by Pavon and another was identified as Buddleia by Galeotti. Linnaeus had a specimen of A. Deppeana in his herbarium. It is filed under the genus Clerodendrum and is sheet number 9 in that folder. It is unnamed and bears no inscriptions on its front side except the number of the sheet. On the reverse side we find in Linnaeus' own handwriting (the identity of the handwriting verified by Dr. Savage!) "Clerodendrum" and then in darker ink and with a heavier pen (but also by Linnaeus, according to Dr. Savage) "No. 8 a Millero" and in the former light ink and fine pen "Cal. amplius 4 fidus obtusus. Cor. 4 fidus. Stam. 4 longiss. Stylus capillaris semi-bifidus." The specimen was probably collected for Linnaeus in the Chelsea Garden, although Miller may have received it from a correspondent or the "No. 8 a Millero" might even mean that sheet number 8 was from Miller. -- The Von Rohr 97 cited below is inscribed "West Indies", but this is certainly erroneous!

Additional citations: MEXICO: Tamaulipas: Schiede 1165 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, N--photo of type, W--photo of type, Z--2 photos of type), s.n. [Estero, Jan. 29] (Bm); Schiede & Deppe 259 (Z--photo); Nayarit: Maltby 107 (W), s.n. [Tres Marias Isls.] (Z--photo); E. W. Nelson 4245 (N--photo, Z--photo), 4254 (Z--photo); Hidalgo: Liebmann 11,302 (Cp), 11,303 (Cp); Veracruz: Gouin s.n. [1867] (P--2); Hahn s.n. [Medelli] (K, P--2); Liebmann 11,936 (Cp); Orcutt 3057 (F), 3418 (F); Edw. Palmer 464 (K, Z--2 photos); Seler & Seler 3734 (B); Nawra 614 (V); Oaxaca: Galeotti 1268 (P); Chiapas: Seler & Seler 2005 (B, N--photo, Z--photo); State undetermined: Herb. Pavon s.n. (Bm--2); Kerber 305 (X); Liebmann 11,957 (Cp); Pavon s.n. [Nueva España] (Z--photo); Sartorius s.n. (Z--photo); Von Rohr 97 (Bm). COSTA RICA: Guanacaste: Standley & Valerio 46,358 (B--photo, D--photo, G--photo, N--2 photos, W--photo, Z--photo); San José: Ørsted 11,179 (Cp) (a); Department undetermined: Ørsted

11,180 (Cp). PANAMA: Chiriquí: Wagner s.n. [Herb. Monac. 1007] (Mu); Veraguas: Seemann 1202 (Bm, K). COLOMBIA: Magdalena: Allen 150 (Z--photo); Bertero s.n. (Dc); H. H. Smith 881 (Bm, Br, Cb--2, E, Ed, K, Le, N, N--photo, P, Ut, Z--photo), 1864 (Bm, Br, Cb, E, Ed, K, Le, P, Ut, Z--photo) (b); Bolívar: Pennell 4543a (Z--photo). FRENCH GUIANA: Von Rohr s.n. (Cp--2). CULTIVATED: England: P. Miller 8 (Ls). LOCALITY OF COLLECTION UNDETERMINED: Ryan s.n. (Cp).

124. AEGIPHILA ELATA Sw.

This binomial is sometimes accredited to "Sch." and occurs written "Aegiphylla elata Sw." The species has been collected in fruit in April; it inhabits roadsides and thickets, and its vernacular name in Cuba is "guauro". Schipp says that it is a "fairly large bush of spreading habit; fls. yellow, slightly perfumed; common in secondary forests. June". It is said to be cultivated in Cuba [J. G. Jack, Buenos Aires, 1930] (2). The Galeotti 7238 mentioned by Turczaninow (3) as possibly representing his A. virgata has now been examined and is definitely A. elata. In the Linnean Herbarium sheet number 8 under Clerodendrum is A. elata. It is unnamed, but bears notations in Limaeus' own handwriting (verified by Dr. Savage!) "Knoxia ? scandens" and also "Knoxia 2 Browne 140. t.3.f.3."

Additional citations: CUBA: Pinar del Río: Ekman 12,959 (B); Roig 1203 (Es); Havana: Acuña s.n. [Herb. Roig 4232] (Es); Santa Clara: Britton & Britton 5086 (N--photo, Z--photo); Jack 7029 (A, K, P, W); Oriente: Ekman 2031 (B, B--photo, D--photo, N--photo, W--photo), 6116 (B, S); Hioram & Maurel 4799 (Z--photo); N. Taylor 414 (Z--photo); C. Wright 429 (Br, Cb--2, E, G, K--2, Os, P, Z--photo), 1354 (B, Cb, E, K--2, P); Province undetermined: G. Don s.n. (B); Eggers 5184 (B, K, Vu), 5184b (B); Linden 1798 (B, Bm, Cb, K); Sagra 360 (Bm). CAYMAN ISLANDS: Fawcitt s.n. [May, 1888] (K); A. S. Hitchcock s.n. [Grand Cayman, 1-17-'91] (E--3); C. F. Millspaugh 1281 (B, N--photo, Z--photo); Rothrock 158 (B). JAMAICA: R. C. Alexander s.n. [Moneague] (K--3), s.n. (Z--photo); Bertero 2104 (B), s.n. [S. D.; Herb. Monac. 1019] (Mu); E. G. Britton 2952 (Z--photo); N. L. Britton 3408 (N); Britton & Harris 10,726 (Z--photo); Britton & Hollick 2693 (N); Chrysler 1636 (Ru--2); Dancer s.n. (Cb); W. Harris 6064 (B, Bg, Bm), 10,021 (B, Bm, K, P), 11,082 (Bm), 11,746 (Bm, E, K), s.n. [7.XI.95] (O1); Hart s.n. (B--photo, D--photo, G--photo, N--photo, W--photo, Z--photo); Herb. Ventenat s.n. (Cb); A. S. Hitchcock s.n. (E); W. Hooker s.n. [1843] (K); March 972 (K), 1461 (K); Masson s.n. (Bm); Maxon 8820 (Z--photo); McFadyen s.n. (K, P); Nichols 75 (E, Os, Z--photo); J. R. Perkins 1271 (K); Purdie s.n. (K, Le, P, Ut); Rehder s.n. (A); Swartz s.n. (Bm--

isotype, Cb--isotype, Dc--isotype, N--photo of isotype, S--3 isotypes, Z--photo of type & 4 photos of isotypes); W. J. Thompson 6493 (B), 8012 (B); Wiles s.n. (Cb); N. Wilson 224 (B), s.n. [Jamaica] (P--2); W. Wright s.n. (Bm, Cb, K); Wullschlägel 974 [Herb. Monac. 1017] (Mu), 1364 [Herb. Monac. 1018] (Mu). HISPANIOLA: Haïti: Bertero 35, in part (E, P), s.n. (Dc); Deschisau s.n. [Herb. Jussieu 5035a] (P); Desportes s.n. [Herb. Jussieu 5035b & 5041] (P--2); Ekman H.5151 (B); Leonard & Leonard 13,072 (A, W); Nash 232 (K); Dominican Republic: Abbott 1368 (B, Z--photo), 2386 (B, Z--photo); Eggers 1602 [Herb. Monac. 3833] (B, Bm, Cb--3, K, Le, M, Vu), 1602b (B), 1602c (B); Ekman H.12,310 (B, N, S), H.13,279 (B, S, W). PORTO RICO: Plee s.n. (P). MARTINIQUE: Collector undesignated s.n. [Hb. Portenschlag] (Z--photo). TRINIDAD: W. E. Broadway 3334 (B); Trin. Bot. Gard. Herb. 2384 (R, Z--photo), 2387 (Z--photo). MEXICO: Oaxaca: Galeotti 7238 (Cb, N--photo, P); Tabasco: Rovirosa 421 (Z--photo); State undetermined: Hahn s.n. [Potrero] (P). GUATEMALA: Alta Verapaz: Türkheim 7961 (K, W, Z--photo); Izabal: P. C. Standley 24,684 (Z--photo). HONDURAS: Santa Bárbara: Thieme 5412 (K); Yoro: P. Wilson 656 (N, Z--photo); Atlántida: P. C. Standley 53,746 (Z--photo), 53,758 (Z--photo), 55,166 (Z--2 photos); Yuncker 4749 (F, M). BRITISH HONDURAS: Burns 10 (F); Schipp 216 (B, Bm, Ca, Cb--2, E, F, J, K, M, S, W). COSTA RICA: Puntarenas: H. Pittier 6782 (Br, X), s.n. [Herb. Instit. Physico-geogr. Nat. Costaric. 12,017] (B, Z--photo); Pittier & Tonduz 6782 (X--3); Tonduz s.n. [Herb. Instit. Physico-geogr. Nat. Costaric. 6782] (B, Br). PANAMA: Panamá: R. S. Williams 829 (W, Z--photo). COLOMBIA: Magdalena: Goudot s.n. (P--2); El Valle: Lehmann 8410 (B, F, K); Cundinamarca: Triana 2081 (Bm, Cb), 3713, in part (Bm). VENEZUELA: Carabobo: H. Pittier 8806a (Cb, G); Suringar s.n. [Puerto Cabello] (Le); Aragua: Fendler 2373 (Z--photo); State undetermined: Moritz 973 (Bm), 1478 (Bm). BRITISH GUIANA: De la Cruz 3320 (Ca, E, Z--2 photos). SURINAM: Fooke 297 (Ut), 396 (Le); Samuels s.n. [Forest of Zandery] (Z--photo). FRENCH GUIANA: W. E. Broadway 421 (Z--photo); Von Rohr s.n. (Op--2). BOLIVIA: Santa Cruz: Steinbach 3259 ? (Z--photo). CULTIVATED: Florida: Buswell s.n. [Gov't. Grounds, July 22, 1934] (Bu, N); Austria: Cult. Hort. Schönb. s.n. (Z--photo). ILLUSTRATIONS: Bot. Reg. 11: t. 946 1826 (B).

121. AEGIPHILA ELEGANS Moldenke.

Specimens of this species have been found in herbaria misidentified as Cordia pubescens Willd.

Additional citations: PERU: Loreto: Killip & Smith 27,055 (A--photo of isotype, B--photo of isotype, D--photo of isotype, F--photo of isotype, G--photo of isotype, K--photo of

isotype, N--photo of type & photo of isotype, P--photo of isotype, S--photo of isotype, W--photo of isotype, Z--photo of type & photo of isotype), 27,562 (B, Z--photo), 27,991 (G, Z--photo); Ule 6239 (K); Juin: Killip & Smith 26,338 (N--photo, Z--3 photos). BOLIVIA: La Paz: Ule 9718 (K).

101. AEGIPHILA ELONGATA Moldenke.

Additional citations: BOLIVIA: La Paz: Buchtien 1645 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, W--photo of type, Z--photo of type & photo of isotype).

61. AEGIPHILA FALCATA Donn. Sm.

A vernacular name for this species in Costa Rica is "zorrillo".

Additional citations: MEXICO: Chiapas: Purpus 6982 (Ca), 7521 (Ca). GUATEMALA: Quezaltenango: Tonduz & Rojas 148 (Z--photo); Retalhuleu: Rojas 584 (W); J. D. Smith 1479 [Herb. Monac. 1724] (A--photo, B--photo, D--photo, F--photo, K, Mu, N--photo, P--photo, S--photo, W, W--photo, Z--3 photos); Escuintla: J. D. Smith 2111 (A--photo of type, B--photo of type, Cb--isotype, D--photo of type, F--photo of type, G--photo of type, K--isotype, N--fragment of isotype, N--photo of type & 2 photos of isotypes, P--photo of type, S--photo of type, W--photo of type, Z--photo of type & 2 photos of isotypes). COSTA RICA: Limón: Biolley 7409 (Br--2); Cartago: H. Pittier 11,244 (K), 13,216 (K, W, X--2). PANAMA: Bocas del Toro: H. Pittier 8643 (Br, Z--photo); Tonduz 8627 (Br--2), 9292 (Br--2, W), 9293 (Br--2, W, Z--photo), 9293b (X--2).

15. AEGIPHILA FASCICULATA Donn. Sm.

The "Aegiphila fasciculata Donn. Sm." which Standley describes in Field Mus. Pub. Bot. 10: 334--335 (1931) and illustrates on plate 57 is Dermatocalyx parviflorus Griseb. and the J. A. Stevenson 83 [Mus. Yale School of Forestry 14,490] distributed by him under this name is also Dermatocalyx parviflorus, a member of the Scrophulariaceae.

Additional citations: GUATEMALA: Alta Verapaz: Türckheim 4013 [Herb. Monac. 4297 & 4298] (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, Mu--2 isotypes, N--photo of type & photo of isotype, P--photo of type, S--photo of type, W--isotype, W--photo of type, Z--photo of type & photo of isotype).

114. AEGIPHILA FENDLERI Moldenke.

Additional citations: VENEZUELA: Aragua: Fendler 2032 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, N--photo of type & 2 photos

of isotypes, P--photo of type, S--photo of type, W--photo of type, Z--photo of type & 2 photos of isotypes).

31. AEGIPHILA FERRUGINEA Hayek & Spruce.

It seems rather certain that the Spruce 9473 originally cited by Hayek as the type collection of this species, is a typographical error for 5473 and that the specimens of this number cited by me as "cotypes" ought to be referred to as "type" and "isotypes".

Additional citations: ECUADOR: Carchi: Mexia 7446 (N); Imbabura: Lehmann 4700 (B--2, B--photo, K, N--photo, Z--photo); Pichincha: Firmin 632 (A--photo, B--photo, D--photo, F--photo, N--photo, S--photo, W--photo, Z--photo); Sodiro 125/22 (B, N--photo, Z--photo); Spruce 5473 (A--photo of cotype, B--photo of cotype, Bm--cotype, Cb--cotype, Cp--cotype, D--photo of cotype, Ed--cotype, F--cotype, F--photo of cotype, G--photo of cotype, K--cotype, N--photo of cotype, P--cotype, S--photo of cotype, V--cotype, W--photo of cotype, Z--3 photos of cotypes), s.n. [Aug. 1858] (K). LOCALITY OF COLLECTION UNDETERMINED: Herb. Pierre s.n. (P).

63. AEGIPHILA FILIPES Mart. & Schau.

This species has been confused with Cordia bifurcata Roem. & Schult. and some herbarium specimens have been so identified! The binomial sometimes occurs accredited merely to Martius. The cotype collection cited below has been referred to as "Martius 1620", in error. The "L. Williams 3146" cited for this species on page 477 is an error and should be deleted.

Additional citations: PANAMA: Panamá: P. C. Standley 26,853 (N--photo, Z--photo). COLOMBIA: Magdalena: H. H. Smith 1831 (Bm, Br, Cb--2, E, Ed, K, Le, N, N--photo, P, Ut, Z--6 photos). PERU: Loreto: Killip & Smith 26,882 (N, W); Raimondi 578 (B), 981 (B); Tessmann 3705 (Cb, Hb); L. Williams 8190 (N--photo, Z--photo). BRAZIL: Amazonas: Ducke 6735 (A--photo, B--photo, Bm, Cb, D--photo, F--photo, G--photo, N--photo, W--photo, Z--photo); Krukoff 5125 (B, Cb, K, N--2, S); Spruce 1761 (Bm, Br, Cb, Ed, F, K, N--photo, P, Z--7 photos); Ule 5686 (Cb, K, Z--photo); Pará: Martius s.n. [Sylvia secus Amazon, Pará; Herb. Monac. 1020 & 1689; Macbride photos 20,350] (G--photo of cotype, Mu--2 cotypes), s. n. [Prov. Paraënsis; Herb. Monac. 1021 & 1022] (Mu--2); Acre Territory: Ule 8293 (B), 9723 (B). BOLIVIA: El Beni: H. H. Rusby 2472 (N--2 photos, Z--2 photos).

66. AEGIPHILA FLORIBUNDA Moritz & Moldenke.

Additional citations: VENEZUELA: Aragua: Fendler 845 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, N--photo of type & 2 photos of

isotypes, S--photo of type, W--photo of type, Z--photo of type & 2 photos of isotypes); Karsten s.n. (V); Moritz 1765 (Bm, N--photo, O1, V--3, Z--3 photos).

28. AEGIPHILA FLUMINENSIS Vell.

This specific name is sometimes written with a capital initial letter. Gardner notes: "Sometimes all the bracts fall off when the persistent calyces are all reflected [reflexed]. Is this when the umbels consist wholly of ♂ flowers?"

Additional citations: BRAZIL: Bahia: Blanchet 682 (Bm, Cb), 1603 (Cb, F), 1740 (Cb--3, P), s.n. [1834] (Bm, Cb); Guillot s.n. [Bahia] (Z--photo); Rio de Janeiro: Burchell 1225 (K, N--photo, Z--photo); Chamberlain s.n. [25 Juli 1817; Herb. Monac. 1023] (Mu); Collector undesignated s.n. (Cb); G. Gardner 5574 (Bm, K, N--photo, Z--2 photos); Gaudichaud 468, in part (P); Glaziou 806 (Br--2, Cp, P), 3067 (Br--2, Cb, P); Guillemin 248 (Cb, Dc, Z--photo); Lhotzky s.n. (N--photo, Z--photo); Luschnath s.n. [Brasilia] (E), s.n. (B); Martius 1039 [Herb. Boas 1113] (Br, Dc), 1112 [Herb. Monac. 1024] (Mu); Miers 3191 (Cb, K), s.n. [Laranjeira] (Bm), s.n. [Tejuco] (Bm); Mikan s.n. [Aquoduit] (Z--photo); Pohl s.n. [Rio de Janeiro] (Br); Riedel 0,40 (L--2); Riedel & Luschnath 323 (L--3); Saint-Hilaire A. 361 (P), A¹. 663 (P), A¹. 665 (P); Schwacke 5381 (Cb); Sellow 36 (B); United States Exploring Exped. [Wilkes] s.n. [Rio de Janeiro] (Z--photo); Von Seneloh 139 (B); Warming s.n. [Juli 1866] (Cp--2), s.n. [Ad Rio de Janeiro] (Bm); Weddell 40 (P), 95 (P); Widgren 661 (Z--photo); Paraná: Dusén 8405 (A--photo, B, B--photo, D--photo, F--photo, G--photo, N--photo, W--photo, Z--photo); State undetermined: Collector undesignated 285 (P), s.n. (Br, K); Herb. Martius s.n. (Br); Luschnath s.n. [Capocabona] (Br); Sellow s.n. [Brasilia] (B).

57. AEGIPHILA FOETIDA Sw.

Aegiphila pubescens W. Wright, in herb. [not A. pubescens Willd., 1840].

Additional citations: JAMAICA: R. C. Alexander s.n. [Jamaica, 1850] (B--3, B--photo, D--photo, E, F--photo, G, N, N--2 photos, P--photo, W, W--photo, Z--4 photos), s.n. [Pleasant Valley, Moneague, 10 Apr. 1850] (K); Distin s.n. (K); March 1411 (B, K); Purdie s.n. [Mt. Diablo, April, 1844] (K); Swartz s.n. [Jamaica] (A--photo of type, B--photo of type, Bm--isotype, Cp--isotype, D--photo of type, Dc--isotype, F--photo of type, G--photo of type, N--photo of type & photo of isotype, P--photo of type, S--photo of type, W--photo of type, Z--photo of type & photo of isotype); W. Wright s.n. (Bm).

68. AEGIPHILA GLABRATA Moldenke.

Additional citations: PERU: Junín: Killip & Smith 25,503 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type & photo of isotype, P--photo of type, S--photo of type, W--photo of type, Z--photo of type & photo of isotype)

62. AEGIPHILA GLANDULIFERA Moldenke.

Haught describes this species as a small tree with pendent inflorescences and says it is "not rare". He also states that "The entire plant is strongly aromatic". Klug says "Shrub 2 m. tall; fls. cream; blooms in April" and reports the vernacular name in Peru "chirapa sachá".

Additional citations: COSTA RICA: Alajuela: Brenes s.n. [Herb. Instit. Physico-geogr. Nat. Costaric. 14, 484] (B, K); Hoffmann 826 (B--2, K, N--photo, Z--photo). PANAMA: Canal Zone: Hayes 74 (N--photo, Z--photo), 145 (Z--photo), 253 (N--photo, Z--photo), 269 (Bm, K); H. Pittier 6519 (G, K, Z--photo); Province undetermined: Hayes s.n. [Dec. 7] (Ed); Seemann 335 (Bm). COLOMBIA: Santander Sur: Dawe 472 (K--isotype, N--photo of type & photo of isotype, S--photo of type & photo of isotype, W--photo of type & photo of isotype, Z--photo of type & photo of isotype); Haught 1629 (N, W); Pennell 3865 (N--photo, Z--photo); Tolima: Goudot s.n. [Ibagué] (Z--2 photos); Antioquia: Woronow & Juzepczuk 4433 (Z--photo). ECUADOR: Napo-Pastaza: Diels 942 (B--2). PERU: Loreto: Klug 3016 (A, B, Cb, K, N); Tessmann 3508 (Hb). BRAZIL: Amazonas: Poeppig 2760 (N--photo, Z--photo).

62a. AEGIPHILA GLANDULIFERA var. PARAENSIS Moldenke.

Additional citations: BRAZIL: Pará: Burchell 10,060 (A--photo, B--photo, D--photo, F--photo, G--photo, K, N--photo, S--photo, W--photo, Z--photo); Killip & Smith 30,661 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, N--photo of type, S--photo of type, W--photo of type, Z--photo of type & photo of isotype); Krukoff 5923 (N, S); Moss s.n. [1919] (Bm).

62b. AEGIPHILA GLANDULIFERA var. PYRAMIDATA L. C. Rich. & Moldenke, var. nov.

Haec varietas a forma speciei typica recedit ramulis pedunculisque rhachideque inflorescentiarum ramisque pedicellisque petiolisque dense strigillosis vel breviter strigosis, pilis adpressis, foliorum laminis subtus et calyce leviter strigillosis, et costa supra minute strigillosa.

This variety differs from the typical form of the species in that its branchlets, peduncles, rachis, branches of the inflorescence, pedicels, and petioles are densely strigillose or short-strigose with appressed antrorse buff-colored

hairs, the calyx and lower leaf-surface are lightly so, and the midrib above minutely so.

The type of this variety was collected by Louis Claude Richard in Pará, Brazil, and is deposited in the herbarium of the Muséum National d'Histoire Naturelle in Paris. The collector has inscribed the following notes on the label of the type specimen: "Aegiphila pyramidata. Caulis fruticosum -- ramis debilibus, propendentibus, pubescentibus. Flores sublutescentes in racemum amplum terminalem pyramidatum. Fructus luteo-rubentes 4-loculare. In vixit fluvii Pará". The Venezuelan vernacular name of "tabaquero" has been recorded by Moritz.

COLOMBIA: Méta: Triana 3713, in part (Bm), VENEZUELA: State undetermined: Moritz 364 (B, Bm). FRENCH GUIANA: Sagot 473, in part (Bm). BRAZIL: Pará: L. C. Richard s.n. (N--photo of type, P--type, Z--photo of type).

17. AEGIPHILA GLEASONII Moldenke.

Additional citations: BRITISH GUIANA: Gleason 237 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--2 photos of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

108. AEGIPHILA GLOMERATA Benth.

Additional citations: ECUADOR: Manabi: Barclay 632 (Bm); Eggers 15,088 (N--photo, Z--photo), 15,827 [Herb. Monac. 3706] (A--photo, B--photo, D--photo, F--photo, G--photo, Le, Mu, N--2 photos, P--2, S--photo, W--photo, Z--2 photos); Sinclair s.n. [Salango Isl.] (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

116. AEGIPHILA GLORIOSA Moldenke.

The species has been confused by some with the genus Vitex. It seems fairly certain that the "1398" on the label of the type specimen is an error for "1998" and that all the specimens of the latter number ought to be regarded as isotypes.

Additional citations: BRAZIL: Bahia: Blanchet 1398 (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, S--photo of type, W--photo of type, Z--photo of type), 1998 (Bm, Cb--2, F, N--fragment); Riedel 781 (L, Z--2 photos). ILLUSTRATION: Line-drawing (N).

32. AEGIPHILA GOELDIANA Huber & Moldenke.

Additional citations: BRAZIL: Pará: Goeldi 8166 (A--photo

of isotype, B--photo of isotype, D--photo of isotype, F--photo of isotype, G--photo of isotype, K--photo of isotype, N--photo of isotype, P--photo of isotype, S--photo of isotype, W--photo of isotype, Z--photo of isotype).

2. AEGIPHILA GOUDOTIANA Moldenke.

Additional citations: COLOMBIA: Cundinamarca: Goudot s.n. [Pandi] (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, K--photo of type, N--photo of type, P--photo of type, S--photo of type, W--photo of type, Z--photo of type).

4. AEGIPHILA GRANDIS Moldenke.

On page 473 Goudot s.n. [Bogotá] is cited as A. Goudotiana. This was due to a typographical error. The specimen is A. grandis. The cheironym "Aegiphila guyanensis Moldenke" occurs on some herbarium specimens, but was never proposed for this species by me! It is not at all the true A. guianensis Moldenke, q. v.

Additional citations: COLOMBIA: Cundinamarca: Goudot s.n. [Bogotá] (A--photo, B--photo, D--photo, F--photo, G--photo, P, S--photo, W--photo, Z--2 photos); Mutis 3657 (S), 4554 (B--photo, Cb, F--photo, G--photo, K, N--photo, S, Z--photo); Triana 2080 (Cb, N--photo, Z--photo), 3712 (Bm), s. n. (W); Tolima: Goudot s.n. [Portachuelo, Quindiu] (B--photo of type, G--photo of type, N--photo of type & photo of isotype, S--photo of type, Z--photo of type & photo of isotype).

19. AEGIPHILA GRAVEOLENS Mart. & Schau.

Aegiphila tetragona Mart., in herb. -- A specimen of Martius 1934 at Munich bears the annotation "Stigmatococca" in a very old handwriting, probably that of Martius, and a note in Latin that the specimen probably represents a new genus in the Rubiaceae or else in the Solanaceae related to Cestrum. A generic description in Latin is appended. Stigmatococca Willd. [ex Schult. Mant. 3^o: 55. 1827] is a genus of doubtful systematic position [see Benth. & Hook. f. Gen. Pl. 2: 888], but is typified by S. solanacea Willd. (l.c.) with alternate leaves and terminal inflorescences, apparently quite a different thing from Martius' proposed genus of the same name. -- The Sellow 608 cited on page 305 as having been collected in São Paulo was actually collected in Bahia [the label at Kew reads "Vittoria - Bahia"]. The Blanchet 3451 cited below is undoubtedly typical of the species. The material examined for my monograph and therein described [pages 304--305] is apparently not typical and ought probably be given a varietal designation at least. On the basis of the new Blanchet material, the specific description as given in my monograph ought to be modified in

the following respects: petioles to 1 cm. long, very weak, often collapsing in drying; blades elliptic, 9.5--21 cm. long, 3--6.6 cm. wide; secondaries to 14 per side; veinlet reticulation obscure above, not at all prominent beneath; cymes to 5 cm. long; peduncles to 2 cm. long; pedicels in anthesis to 18 mm. long; calyx in anthesis sometimes to 5 mm. long and 6 mm. wide, often densely pulverulent-punctate; filaments 1 mm. long; style 2--3 mm. long; stigma branches 1.5 mm. long.

Additional citations: BRAZIL: Bahia: Blanchet 231 (P, V), 3451 (B, C, Cb--2, N--fragment, N--photo), 3651 (Br, N--photo, V, Z--2 photos); Martius 1934 [Herb. Monac. 1091 & 1692] (Mu--2); Riedel 221 (L--2, N--fragment); Sellow 608 (B, B--photo, K, N--photo, Z--2 photos); Rio de Janeiro: Martius 120 [Herb. Monac. 1025 & 1027] (Mu--2), s.n. [Herb. Monac. 1026] (Mu); Miers s.n. [Barra de Iguassu] (Bm); Riedel & Luschnath 1473 (L--2); São Paulo: Burchell 5019 (A--photo, B--photo, D--photo, F--photo, G--photo, K, N--photo, S--photo, W--photo, Z--photo); Gehrt s.n. [Herb. Instit. Biol. S. Paulo 30,081] (K--2, N--2, Sp); Lund 796 [Macbride photos 7880] (B--photo of type, Dc--type); Sellow 802 (B, P, Z--2 photos), 878 (A--photo, B--photo, Bm, D--photo, F--photo, G--photo, N--photo, S--photo, W--photo, Z--photo); State undetermined: Sellow 2 (B--2), 2189 (Br).

43. AEGIPHILA GUIANENSIS Moldenke.

Aegiphila arborea Spruce, in herb. -- The "Aegiphila guyanensis Moldenke" which appears on some herbarium specimens is a cheironym which I did not propose, but which is apparently synonymous with A. grandis.

Additional citations: COLOMBIA: Cundinamarca: Triana 2084 (Cb--2, Z--2 photos); Méta: Karsten s.n. [Llano de San Martín, Villavicencio] (L, N--photo, Z--photo); Triana 3713, in part [Llano de San Martín, Villavicencio] (Bm). VENEZUELA: Amazonas: Spruce 3578 (K, N--photo, Z--photo). BRITISH GUIANA: M. R. Schomburgk 404, in part (A--photo of type, B--photo of type, D--photo of type, F--photo of type, G--photo of type, N--photo of type & photo of isotype, S--photo of type, W--photo of type, Z--photo of type & photo of isotype). BRAZIL: Pará: Spruce 3113, in part (K).

22. AEGIPHILA HASSLERI Briq.

The "Hassler 6831" cited on page 473 is an error and should be deleted. The Sellow specimens at Berlin and cited under A. brachiata may represent A. Hassleri instead! The Niederlein 1205 and Arechavaleta B are anomalous in their almost completely glabrous leaves! They may well represent a distinct variety. Fruiting specimens from Paraguay, however, such as Fiebrig 5923, also have the leaves almost

completely glabrous!

Additional citations: BRAZIL: Paraná: Dusén 9382 (S). PARAGUAY: Anisits 122 (Z--photo); Balansa 2085 (B--2, Bm, Cb--2, P--2, Z--photo), 2085a (Cb--2, N--fragment, P); Fiebrig 260 [Herb. Monac. 4033] (B, B--photo, Bm, Cb, D--photo, Ed--3, F--photo, G--photo, K, Le, Lu, N--photo, W--photo, Z--photo), 530 (B, Cb, Ed, H--photo, Z--photo), 5923 (Z--2 photos); Hassler 1674 (K--cotype, P--cotype, Z--photo of cotype), 3193 (Bm--cotype, Cb--2 cotypes, F--cotype, K--cotype, N--fragment of cotype, N--photo of cotype, P--cotype, X--cotype, Z--2 photos of cotypes), 4271 (Bm--cotype, Z--photo of cotype), 6780 (A--photo of cotype, B--photo of cotype, Bm--cotype, Cb--cotype, D--photo of cotype, F--photo of cotype, N--2 photos of cotypes, P--cotype, W--photo of cotype, X--3 cotypes, Z--photo of cotype), 8632 (Bm, Cb--2, K, P). ARGENTINA: Misiones: Ekman 1227 (Z--photo), 1228 (N--photo, Z--photo); Niederlein 1705 (Z--photo), 1725 (Z--photo), 1732 (Z--photo), 2248 (B, Z--photo); Corrientes: Bonpland 755 (P). URUGUAY: Arechavaleta 43 (Cb--3, F, N--fragment), B (B), s.n. (Cp--2 photos); Berro 1019 (X), 5087 (X); Felippone 5082 (Z--photo). ILLUSTRATION: Lamina 1, "Rana florida en tamaño", etc. (Dr).

34a. AEGIPHILA HASTINGSIANA Moldenke, sp. nov.

Frutex vel arbor; ramulis gracilibus obtuse tetragonia densissime breviterque pubescentibus; petioli dense breviterque pubescentibus, pilis fulvis vel ferrugineis; foliis chartaceis ellipticis breviter acuminatis, ad basin longiuscule acuminatis, supra dense puberulis vel sparse breviterque pubescentibus, subtus dense velutinis et punctatis; inflorescentiis axillaribus cymosis; pedunculis gracilibus; margine calyce valde 4-dentato; staminibus 4.

Shrub or tree; branchlets slender, obtusely tetragonal, very densely short-pubescent with fulvous or ferruginous hairs; nodes not annulate; principal internodes 2--4.8 cm. long; leaves decussate-opposite; petioles slender or stoutish, 3--7 mm. long, densely short-pubescent with fulvous or ferruginous hairs, flattened and canaliculate-margined above, convex beneath, not conspicuously ampliate at base; blades chartaceous, dark green above, lighter beneath, elliptic (or stunted ones at the base of the branchlets sometimes almost subrotund), 2.8--10.8 cm. long, 2--4.8 cm. wide, short-acuminate at apex (or rounded on stunted leaves), entire, rather long-acuminate at base, rather densely puberulent above or sparsely short-pubescent, very densely velutinous-pubescent with fulvous or ferruginous hairs beneath and there also densely punctate, marked with numerous, black, elliptic or circular, glandular disks along the midrib toward the base beneath; midrib slender or

comparatively stout, flattened or subprominent and very narrow above, rounded-prominent beneath; secondaries slender, 7--9 per side, arcuate-ascending, flattened above, prominent beneath, rather obscurely arcuate-joined in many loops near the apex; vein and veinlet reticulation obscure or indiscernible on both surfaces; inflorescence axillary, cymose; cymes solitary, opposite, 1.3--2.5 cm. long, 7--18 mm. wide, densely many-flowered, brachiate, far shorter than the subtending leaves; peduncles slender, 5--10 mm. long, densely short-pubescent with fulvous or ferruginous hairs; bracts none; pedicels obsolete; calyx campanulate, thin, light and herbaceous, 2.8--3 mm. long, 2--3.2 mm. wide, densely short-pubescent throughout outside, its rim conspicuously 4-lobed or 4-toothed, each lobe triangular, about 1 mm. long and 1.6 mm. wide at base, acute at apex; corolla infundibular, its tube cylindric, 2.4--2.8 mm. long, about 0.7 mm. wide at the middle, often slightly swollen to 1 mm. at the base and apex, glabrous throughout, its limb 4-parted, its lobes elliptic-obovate, about 2 mm. long and 1 mm. wide, obtuse at apex; stamens 4, inserted at 2 levels, one pair about 1.6 mm. and the other pair about 1.8 mm. above the base of the corolla-tube, included; filaments obsolete or very abbreviated; anthers oblong, about 0.8 mm. long and 0.4 mm. wide, 2-celled, dorsifixed near the base; style capillary, exserted, 4.8--6 mm. long, glabrous; stigma bifid, its branches about 2.3 mm. long, twisted; ovary subglobose, 0.8--1 mm. long and wide, depressed above, glabrous, 4-celled; fruiting-calyx and fruit not seen.

The type of this rare species was collected by René de Grosourdy somewhere in Guatemala in 1864 and is deposited in the herbarium of the Muséum National d'Histoire Naturelle in Paris. The species is named in honor of George Tracy Hastings, noteworthy collector in Chile, Hawaii, and the U. S.A., successful botanical educator, editor of "Torreya" since 1921, and an ardent student of Nature.

GUATEMALA: Province undetermined: Grosourdy s.n. [1864] (N--fragment of type, P--type).

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- (a) This specimen may have been collected in Cartago or in Puntarenas. The label merely states "Inter San José et Puntarenas".
- (b) On page 452, line 41, this number is erroneously cited as "1861".
- (1) Brittonia 1: 245--477. 1934.
- (2) List Pl. Atkins Instit. Arnold Arb. 7. 1933.
- (3) Bull. Soc. Imp. Nat. Mosc. 36²: 220. 1863.
- (4) Oldfield Thomas, Proc. Zool. Soc. 1893: 242. 1893.
- (5) Natural Sci. 4: 57. 1894.
- (6) Science II, 37: 866--867. 1913.